TECHNICAL REVIEW AND EVALUATION OF APPLICATION FOR AIR QUALITY PERMIT #67115

BLT Companies, LLLP

I. INTRODUCTION

This Class II renewal permit is issued to BLT Companies, LLP, the Permittee, for the continued operation of a hot mix asphalt plant with a collocated crushing and screening plant and a collocated concrete batch plant. This facility is located at 5401 Highway 95, Yuma AZ. This is a renewal of Permit No. 56606.

A. Company Information

1. Facility Name: BLT Companies – Hot Mix Asphalt #1

2. Facility Location: 5401 S Highway 95, Yuma, AZ 85365

3. Mailing Address: P.O. Box 6486, Yuma, AZ 85366

B. Attainment Classification

This facility is located in an area of PM₁₀ nonattainment.

II. PROCESS DESCRIPTION

A. The facility operates four stationary plants with one self-propelled mobile crushing and screening plant occasionally. The stationary plants are a hot mix asphalt plant, a crushing and screening plant, a wash plant, and a concrete batch plant.

The hot mix asphalt plant is a continuous process that heats and mixes aggregates with asphaltic oil to produce material suitable for asphalt paving. The aggregates are dried and heated in a counter flow rotary drum dryer. The heat is provided by a single burner using on-specification used oil. The asphaltic oil is preheated in an indirect fired tank for maintaining liquid state and is pumped to the drum dryer for mixing with the hot aggregate. The exhaust of rotary drum dryer is controlled in a high temperature baghouse for minimizing the particulate emissions. The resulting asphalt mix is conveyed to storage silos from where it is discharged for off-site sales.

The crushing and screening plant uses run-of-mine rock to produce various sizes of crushed and screened product. The product is divided at the splitter box where approximately 1/3 of the product is further processed for use in the asphalt plant and for other off-site uses. The remaining material is processed through the wash plant where it emerges as a clean and sized material for use in the on-site concrete batch plant and transport to other BLT concrete batch plants off-site.

The concrete batch plant operates on demand to produce dry, transit mix concrete. Washed aggregates are fed to the system where they are metered to appropriate amounts of cement and fly ash. The dry mix is then discharged to the transit mix truck where water is added.



B. Control Devices

Baghouses are used to control emissions from the rotary drum dryer, cement silos, and fly ash silos. A cyclone dust collector is used for separating fines from the intermediate product. Water trucks and/or manually operated water sprays are used to control dust on storage piles and unpaved roads.

III. EMISSIONS

Table 1: Potential Emissions Based Upon Operating Limitation of 3,416 hours per year

Pollutant	Emissions (tons per year)
PM_{10}	36.84
PM _{2.5}	36.84
СО	89.98
NO _x	37.73
SO_2	39.63
VOC	29.38

IV. APPLICABLE REGULATIONS

Table 2 displays the applicable requirements for each permitted piece of equipment along with an explanation of why the requirement is applicable.

Table 2: Verification of Applicable Regulations

Unit	Control	Rule	Discussion
	Device		
Drum Dryer	Baghouses	NSPS Subpart I	The drum dryer and associated equipment were manufactured after the NSPS trigger date and are hence subject to the requirements of NSPS as per Subpart I § 60.90 of 40 CFR 60.



Unit	Control Device	Rule	Discussion
Asphalt Heater	No Control	A.A.C. R18-2-724	This rule applies to all fossil fuel fired industrial and commercial equipment in which fuel is burned for the primary purpose of producing steam, hot water/air or other liquids. These asphalt heaters are not covered by NSPS requirements since the heat input of individual equipment is <10 million BTU/hr as specified in Subpart Dc of 40 CFR 60.
Crushing & Screening Plant	Water Sprays/Water Truck and Other Reasonable Precautions	40 CFR 60, Subpart OOO	Subpart OOO contains standards for equipment constructed after August 31, 1983.
Concrete Batch Plant	Baghouse Water Spray and Other Reasonable Precautions	A.A.C. R-18-2-723 A.A.C. R-18-2-702.B	Standards of Performance for concrete batch plants
Fugitive Dust Sources	Water Trucks Dust Suppressants	A.A.C. R18-2 Article 6 A.A.C. R18-2-702	These standards are applicable to all fugitive dust sources at the facility.
Abrasive Blasting	Wet blasting; Dust Collecting Equipment; Other Approved Methods	A.A.C. R-18-2-702 A.A.C. R-18-2-726	These standards are applicable to any abrasive blasting operation.
Spray Painting	Enclosures	A.A.C. R18-2-702 A.A.C. R-18-2-727	This standard is applicable to any spray painting operation.
Demolition/Renovation operations	N/A	A.A.C. R18-2-1101.A.8	This standard is applicable to any asbestos related demolition or renovation operations.
Mobile Sources	None	A.A.C. R18-2-801	These are applicable to off- road mobile sources, which either move while emitting air pollutants or are frequently moved during the course of their utilization.



V. PREVIOUS PERMIT CONDITIONS

Permit No. 56606 was issued on July 23, 2013, for the continued operation of this facility. Table 3 below illustrates if a section in Permit No. 56606 was revised or deleted.

Table 3: Permit No. 56606

Section No.	Determination		Comments
	Revised	Delete	
Att. A	X		General Provisions - Revised to represent most recent template language.
Att. B Cond. I	X		Visible Emissions Monitoring Procedure - Condition was revised to include Alt 082 as a method for observing opacity.
Att. B Cond. II	X		Hot Mix Asphalt Plant – Monitoring of pressure drop across the baghouse was imposed. Also, black light inspections were increased from annually to semi-annually.

VI. MONITORING REQUIREMENTS

A. Facility Wide

- 1. The hot mix asphalt plant is limited to 3,417 hours of operation in any rolling twelve-month period. The Permittee is required to maintain daily, monthly, and rolling twelve-month totals of operation hours.
- 2. The permit specifies ALT-082 and an EPA Reference Method 9 observer as acceptable methods for conducting instantaneous surveys. ALT-082 and EPA Reference Method 9 are specified acceptable methods for conducting six-minute observations.

B. Hot Mix Asphalt Plant

- 1. The Permittee is required to show compliance with the opacity standards by conducting an instantaneous survey each month on all affected facilities. If the results of the initial survey appear on an instantaneous basis to exceed the applicable opacity standard, then the Permittee is required to conduct a six-minute observation.
- 2. The hot aggregate mixture shall not exceed the asphaltic smoke point for the material being processed. The Permittee is required to continuously record the temperature of the hot aggregate mixture.
- 3. The Permittee is required to maintain copies of fuel analysis to document that the used oil burned in the drum dryer meets the definition of on specification used oil.
- 4. To ensure that the drum dryer baghouse is operating properly, the Permittee is required to continuously measure the pressure drop across the baghouse. Pressure drop is recorded once per day.
- 5. In addition to monitoring pressure drop, to ensure that the drum dryer baghouse is operating properly the Permittee is required to conduct two (2) black light inspections each year to detect broken or leaking bags. Any broken or leaking bags shall be repaired and/or replaced as soon as practicable.



C. Asphalt Heater

- 1. The Permittee is required to conduct an instantaneous survey each month on the asphalt heater. If the results of the initial survey appear on an instantaneous basis to exceed the applicable opacity standard, then the Permittee is required to conduct a six-minute observation.
- 2. The Permittee is limited to burning only Fuel Oil #2 in the asphalt heater. The Permittee is required to maintain copies of fuel certifications which include the heating value and sulfur content of the fuel that is burned in the asphalt heater.

D. Crushing and Screening Equipment

The Permittee is required to show compliance with the opacity standards by conducting an instantaneous survey each month on all facilities. If the results of the initial survey appear on an instantaneous basis to exceed the applicable opacity standard, then the Permittee is required to conduct a six-minute observation.

E. Concrete Batch Plant

The Permittee is required to show compliance with the opacity standard by conducting an opacity survey each month on all facilities. If the results of the initial survey appear on an instantaneous basis to exceed the applicable opacity standard, then the Permittee is required to conduct a six-minute observation.

F. Fugitive Dust

- 1. The Permittee is required to keep record of the dates and types of dust control measures employed.
- 2. The Permittee is required to show compliance with the opacity standards by conducting an instantaneous survey each month. If the results of the initial survey appear on an instantaneous basis to exceed the applicable opacity standard, then the Permittee is required to conduct a six-minute observation.
- 3. The Permittee is required to keep records of the name of the observer, the time, date, and location of the observation and the results of all surveys and observations.
- 4. The Permittee is required to keep records of any corrective action taken to lower the opacity of any emission point and any excess emission reports.

G. Periodic Activities

- 1. The Permittee is required to record the date, duration and pollution control measures of any abrasive blasting project.
- 2. The Permittee is required to record the date, duration, quantity of paint used, any applicable MSDS, and pollution control measures of any spray painting project.
- 3. The Permittee is required to maintain records of all asbestos related demolition or renovation projects. The required records include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

H. Mobile Sources



The Permittee is required to keep records of all emission related maintenance performed on the mobile sources.

VII. TESTING REQUIREMENTS

The Permittee is required to conduct at least one particulate matter performance test on the hot mix asphalt plant during the term of this renewal permit. The performance test will occur after the Permittee acquires jobs with sufficient throughput to conduct a representative performance test.

If the results of the performance test indicate that particulate matter emissions are less than or equal to 75% of the applicable emission standard, then no subsequent performance test are required during the permit term. However, if the results or the performance test indicate that particulate matter emissions are greater than 75% of the applicable emission standard, then the Permittee is required to conduct subsequent performance test each year until the emissions are less than or equal to the 75% of the applicable emission standard.

VIII. COMPLIANCE HISTORY

ADEQ conducted five physical inspections of the facility and 17 report reviews during the term of Permit No. 56606.

During a physical inspection on July 15, 2015, it was determined that the facility had not conducted a performance test on the drum drier within 180 days of issuance of Permit No. 56606. The facility was issued a Notice of Correction for this permit deviation.

IX. LIST OF ABBREVIATIONS

A.A.C	 Arizona Administrative Code
ADEQ	 Arizona Department of Environmental Quality
CO	
NO _x	
PM ₁₀	 Particulate Matter Nominally less than 10 Micrometers
PTE	 Potential-to-Emit
SO_2	 Sulfur Dioxide
TPY	
	Volatile Organic Compound